

REMARKS

Claims 1-15 are currently pending in the application. Claims 14 and 15 are allowed.

On page 2 of the Office Action, claims 1 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent No. JP 01-007669 (Ariga).

Ariga is directed to a gas laser oscillator. Applicants respectfully submit that not only is the gas laser oscillator in a different field than that of the present invention, the purpose of Ariga is different from that of the present invention. In contrast to Ariga, for example, one of the purposes of at least one embodiment of the present invention is to excite a laser medium gas uniformly and to obtain laser beams at a stable mode. The laser beams are obtained by forming a contact surface with an electrode on a cross section, vertical to the direction of the laser induction of a discharge tube to a recessed shape, in the relationship of a distance with an internal surface corresponding to the contact surface.

In at least one embodiment of the present invention, an electrode (11) is placed inside of a recess portion (10a) formed on an external surface of a tubular body. As a result, positional shift does not occur between the electrode placed in the recess portion and the tubular body. See specification of the present invention, page 10, lines 4-8. See *also* FIG. 3 and FIG. 4

Applicants respectfully submit that independent claim 1 is patentable over Ariga, as Ariga fails to disclose, "at least one electrode among said plurality of electrodes is placed inside of said recess portion," as recited in currently amended independent claim 1.

On page 4 of the Office Action, the Examiner alleges that Figure 5 clearly shows a portion of an electrode placed inside of the recess portion. Applicants respectfully submit that Figure 5 does not illustrate a portion of the electrode *inside* of the recess portion. Assuming *arguendo* that the gap or space on the tube in Figure 5 can be considered a recess portion, none of the electrode (21d) is located in the recess portion. More specifically, none of the electrode is located *inside* of the "recess portion." At most, one could possibly conclude that the electrode is located atop the "recess portion" in Ariga. As is clearly shown in Figures 3, 4, 5, 6, 7, and 8, the electrodes simply lie atop the tube.

Further, the capacity of a capacitor increases as an area in which opposing electrodes overlap becomes larger. Hence, a reactive current required for electric charge increases.

Therefore, the smaller width of an electrode is preferred. Moreover, the range of gas pressure differs between the present invention and the cited reference. In the range of gas pressure of the present invention, a discharge is likely to occur only at a protruding electrode portion. On the other hand, in the construction of the cited reference in which the width of an electrode is set to exceed the width of a gap, the efficiency of discharge remarkably deteriorates.

In other words, the construction of the present invention realizes more efficient discharge than that of the cited reference, and thus, the capacity of power supply can be reduced.

In light of the foregoing, Applicants respectfully submit that claim 1 is patentable over the reference, as the reference fails to disclose the above-identified feature of claim 1. As dependent claims 2-8 depend from independent claim 1, the dependent claims are patentable over the reference for at least the reasons presented for the independent claims.

If there are any formal matters remaining after the response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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